

Ser. No.: 10/081,273
Amdt. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A handle for one-handed ergonomic manipulation of a tool or the like, the tool being detachably connectible to the handle, comprising:
 - the handle having forward and rearward ends;
 - an attachment post at the forward end of the handle, the post having a first longitudinal axis;
 - a connector at the forward end of the post, constructed to releasably attach a tool or the like to the handle;
 - a grip fixed to the attachment post, the grip having a second longitudinal axis extending transverse to the first axis in a pistol-grip configuration;
 - a seat portion fixed to the grip and extending rearward therefrom to underlie the bottom of the user's wrist when the grip is grasped without restraining side-to-side flexure of the wrist; and
 - a band-like, elongate brace integral with and extending from one side of the seat portion, the brace extending rearwardly and in a continuous helix that wraps progressively and, in cooperation with the seat portion, defines a substantially complete revolution about an open space to accommodate and surround the lower arm of the user, from the wrist to the rearward end of the device.
2. (Previously Presented) An ergonomic handle according to claim 1, wherein said open space circumscribed by said brace has a conical shape.
3. (Previously Presented) An ergonomic handle according to claim 1, wherein said attachment post, said grip, said seat, and said brace are integrally formed as sections of a body.
- 4-5. (cancelled)
6. (Previously Presented) An ergonomic handle according to claim 1, wherein said first and second axes intersect in an acute angle.

Ser. No.: 10/081,273
Amdt. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

7. (Previously Presented) An ergonomic handle according to claim 6, wherein said second axis and the seat intersect at an angle which is supplementary to said acute angle.

8. (Previously Presented) An ergonomic handle according to claim 1, wherein said helix is constructed with a helix angle that increases from forward to rearward.

9. (Previously Presented) An ergonomic handle according to claim 1, wherein said helix is constructed with a radius of curvature that increases from forward to rearward.

10. (Previously Presented) An ergonomic handle according to claim 1, wherein said brace is constructed with a substantially straight portion at its distal end to provide additional space for insertion of the arm into said conical space.

11. (Cancelled).

12. (Previously Presented) An ergonomic handle, according to claim 1, wherein said brace is oriented so that the wrist is free to flex to allow the hand to twist on said grip about said second axis.

13. (Previously Presented) An ergonomic handle, according to claim 1, wherein said brace is oriented so that the wrist is free to flex about a third axis displaced rearward of said second axis and transverse thereto.

14. (Previously Presented) An ergonomic handle, according to claim 1, wherein said brace is oriented so that the wrist is free to flex to allow the hand to twist on said grip about said second axis and to flex about a third axis displaced rearward of said second axis and transverse thereto, said flexing operating to lock the wrist and forearm into engagement with the brace to distribute forces away from the wrist.

15-16. (cancelled)

Ser. No.: 10/081,273
Amtd. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

17. (Previously Presented) An ergonomic handle, according to claim 1, wherein said seat is substantially flat from forward to rearward.

18. (Currently Amended) A handle for one-handed ergonomic manipulation of a tool or the like, the tool being detachably connectible to the handle, comprising:

the handle having forward and rearward ends;

an attachment post at the forward end of the handle, the post having a first longitudinal axis;

a connector at the forward end of the post, constructed to releasably attach a tool or the like to the handle;

a grip fixed to the attachment post, the grip having a second longitudinal axis extending transverse to the first axis in a pistol-grip configuration;

a band-like, elongate brace integral with and extending transversely to one side of the grip, the brace extending rearwardly and in a continuous helix that wraps progressively and for a substantially complete revolution to define an open space to accommodate and surround the lower arm of the user, from the wrist to the rearward end of the device.

19. (Previously Presented) An ergonomic handle, according to claim 18, wherein said open space circumscribed by said brace has a conical shape.

20. (Previously Presented) An ergonomic handle, according to claim 18, wherein said attachment post, said grip, and said brace are integrally formed as sections of a body.

21-22. (cancelled)

23. (Previously Presented) An ergonomic handle, according to claim 18, wherein said first and second axes intersect in an acute angle.

24. (Previously Presented) An ergonomic handle, according to claim 18, wherein said helix is constructed with a helix angle that increases from forward to rearward.

Ser. No.: 10/081,273
Amdt. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

25. (Previously Presented) An ergonomic handle, according to claim 18, wherein said helix is constructed with a radius of curvature that increases from forward to rearward.

26. (Previously Presented) An ergonomic handle, A device according to claim 18, wherein said brace is constructed with a substantially straight portion at its rearward end to provide additional space for insertion of the arm into said conical space.

27. (Cancelled)

28. (Previously Presented) An ergonomic handle, according to claim 18, wherein said brace is oriented so that the wrist is free to flex to allow the hand to twist on said grip about said second axis.

29. (Previously Presented) An ergonomic handle, according to claim 18, wherein said brace is oriented so that the wrist is free to flex about a third axis displaced rearward of said second axis and transverse thereto.

30. (Previously Presented) An ergonomic handle, according to claim 18, wherein said brace is oriented so that the wrist is free to flex to allow the hand to twist on said grip about said second axis and to flex about a third axis displaced rearward of said second axis and transverse thereto, said flexing operating to lock the wrist and forearm into engagement with the brace.

31-32. (Cancelled)

33. (Currently Amended) In combination with a hand-held tool or the like having a pistol grip, a brace to facilitate one-handed ergonomic manipulation of the tool, the brace comprising:

the brace having a forward end and a rearward end;

Ser. No.: 10/081,273
Amdt. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

the forward end of the brace being attached to the pistol grip, the rearward portion of the brace comprising a band-like, elongate member in the form of a continuous helix that wraps progressively and for a substantially complete revolution to define an open space to accommodate and surround the lower arm of the.

34. (Previously Presented) The combination according to claim 33, further comprising a seat portion fixed to said grip and extending rearward therefrom transverse to the grip and extending between said grip and said brace

35. (Previously Presented) The combination according to claim 34, wherein said brace and seat are integrally formed with said grip.

36. (Previously Presented) The combination according to claim 33, wherein said open space circumscribed by said brace has a conical shape.

37. (Previously Presented) The combination according to claim 33, wherein said helix is constructed with a pitch that decreases from forward to rearward.

38. (Previously Presented) The combination according to claim 33, wherein said helix is constructed with a radius of curvature that increases from forward to rearward.

39. (Previously Presented) The combination according to claim 33, wherein said brace is constructed with a substantially straight portion at its distal end to provide additional space for insertion of the arm into said conical space.

40. (Currently Amended) The combination according to claim 33, wherein said brace is oriented within the device so that the wrist is free to flex to allow the hand to twist on said grip about said second axis.

Ser. No.: 10/081,273
Amtd. Dated April 26, 2007
Reply to Office action of Nov. 21, 2006

41. (Currently Amended) The A combination according to claim 33, wherein said brace is oriented within the device so that the wrist is free to flex about a third an axis displaced rearward and transverse of said pistol pistol grip and transverse thereto.

42-44. (Canceled)